

What is claimed is

1. Human thrombopoietin derivative which derived from human thrombopoietin (hTPO) described by SEQ ID NO: 30; which has at least one additional N-linked glycosylation site; and which is selected from the group comprising:

[Asn¹⁰⁸] hTPO;

[Asn¹¹⁷] hTPO;

[Asn¹⁴⁷] hTPO;

[Asn¹⁵³] hTPO;

[Asn¹⁶⁴] hTPO;

[Asn¹⁹³] hTPO;

[Asn¹¹⁷, Asn¹⁴⁷] hTPO;

[Asn¹¹⁷, Asn¹⁶⁴] hTPO;

[Asn¹⁰⁸, Asn¹⁴⁷] hTPO;

[Asn¹⁰⁸, Asn¹⁶⁴] hTPO;

[Asn¹⁴⁷, Asn¹⁶⁴] hTPO;

[Asn¹¹⁷, Asn¹⁴⁷, Asn¹⁶⁴] hTPO;

[Asn¹⁰⁸, Asn¹⁴⁷, Asn¹⁶⁴] hTPO;

[Asn¹⁰⁸, Asn¹¹⁷, Asn¹⁶⁴] hTPO;

[Asn¹⁵⁷, Asn¹⁶⁴] hTPO;

[Asn¹⁶², Ser¹⁶⁴] hTPO;

[Asn¹⁶², Thr¹⁶⁴] hTPO;

[Asn¹⁵³, Ser¹⁵⁵, Asn¹⁶⁴] hTPO;

[Asn¹⁵³, Thr¹⁵⁵, Asn¹⁶⁴] hTPO;

[Asn¹⁵⁹, Ser¹⁶¹, Asn¹⁶⁴] hTPO;

[Asn¹⁵⁹, Thr¹⁶¹, Asn¹⁶⁴] hTPO;

[Asn¹⁶⁶, Ser¹⁶⁸] hTPO;

[Asn¹⁶⁶, Thr¹⁶⁸] hTPO; and

5 [Asn¹⁶⁴, Asn¹⁶⁸] hTPO.

2. The human thrombopoietin derivative of claim 1
which is [Asn¹⁶⁴] hTPO, [Asn¹⁹³] hTPO, [Asn¹⁰⁸, Asn¹¹⁷,
Asn¹⁶⁴] hTPO, or [Asn¹⁵⁷, Asn¹⁶⁴] hTPO.

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3. Recombinant gene encoding human thrombopoietin
derivative of claim 1.

4. Recombinant gene encoding human thrombopoietin
15 derivative of claim 2.

5. Eukaryotic expression vector containing the
recombinant gene of claim 3.

20 6. The eukaryotic expression vector of claim 5 which
is p40433, p40434, p40449, p40458, pD40433, pD40434,
pD40449, or pD40458.

25 7. Mammalian cell line CHO K-1/p40433 (Accession NO:
KCTC 0495BP) transfected with the expression vector
p40433 of claim 6.

8. Mammalian cell line CHO dhfr-/pD40434 (Accession NO: KCTC 0630BP) transfected with the expression vector pD40434 of claim 6.
- 5 9. Mammalian cell line CHO dhfr-/pD40449 (Accession NO: KCTC 0631BP) transfected with the expression vector pD40449 of claim 6.
- 10 10. Mammalian cell line CHO dhfr-/pD40458 (Accession NO: KCTC 0632BP) transfected with the expression vector pD40458 of claim 6.
- 15 11. Process of preparing the human thrombopoietin derivative of claim 1 wherein a mammalian cell line containing the recombinant gene of claim 3 is used to obtain the human thrombopoietin derivative of claim 1.
- 20 12. Pharmaceutical composition containing the human thrombopoietin derivative of claim 1 which is used for the treatment of thrombocytopenia.